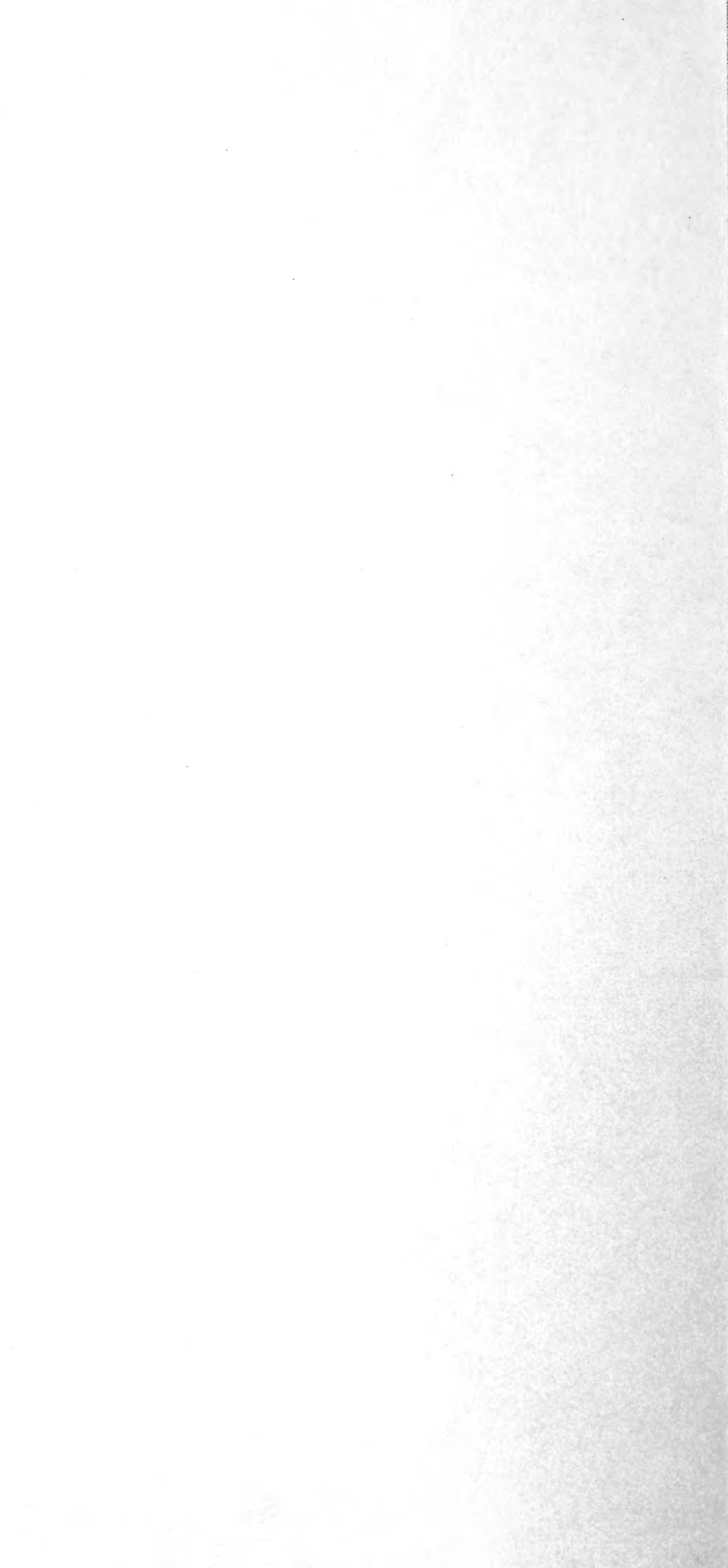


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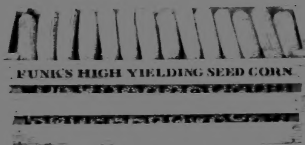
1908 BOOK ON CORN 1908

FUNK BROS. SEED CO.

LARGEST GROWERS OF SEED CORN
IN THE WORLD



1824



1908

TRADE MARK

Our New Warehouse

and Business Offices



Located at Bloomington, Ill.

The location of our New Warehouse insures our customers of the lowest freight rates and quickest service

5 - Railroads - 5

East and West - North and South
Quick service . no transfer charges

ALL QUOTATIONS are F. O. B. Cars
Bloomington, Ill.

Chicago & Alton
Big Four
Lake Erie & Western
Illinois Central
Illinois Traction System

Bloomington has the best freight rates in the state for
either state or inter-state business

T E R M S

WHILE we exercise the greatest care to have our seeds pure, true, and reliable, we do not give any warranty, expressed or implied and are in no way responsible for the crop.

If the seeds are not fully satisfactory, they must be returned to us at once, at our expense and money will be refunded.

SPECIAL NOTICE

Previous to shipping, samples from each variety of corn, oats, and other seeds are carefully tested for germination.

We request that our customers upon receipt of goods, will immediately open the crates, sacks or packages, examine contents carefully and if not found entirely satisfactory or not up to sample, repack and return the same to us in the original packages, **AT OUR EXPENSE**, and we will refund the money paid for the same.

Our seeds are shipped with the understanding that you may have ten days after their arrival to make such tests as you desire. If within that time, they are found to be unsatisfactory, they are to be returned to us at once as explained above.

We cannot return money for any order that has been in your hands longer than ten days.

Prices are F.O.B. Bloomington or Funks Grove, Ill.

Remittance must accompany each order.

Crates and bags are free.

Ear corn 70 lbs. per bushel net.

Shelled corn 56 lbs. per bushel net.

Your money refunded if seeds are not satisfactory.

No risk or loss to you.

We make every effort to fill orders the same day as received. If you wish to hold yours in our seed house until planting time, kindly advise us to that end.

Owing to the demand for our seed corn which we have as yet never been able to fill, we must limit sales to single parties to twenty bushels of crate corn and fifty bushels of shelled corn.

FUNK BROS. SEED CO., Bloomington, Ill.

General Announcement

NEVER before in the history of our firm have the prospects been so bright for a splendid year's business.

We have just harvested the best corn crop in many years.

The quality is A. No. 1, and the yield a bumper.

We are located in our new warehouse with shipping facilities in all directions.

Our new location gives you minimum freight rates and fastest service.

All orders will be shipped the same day as received unless otherwise ordered—no delays.

We have made several strides forward this year, notably in our methods of picking, selecting, curing, storing, and grading seed corn. Each phase will be treated in turn in the following pages.

Long before there was any damaging frosts to injure the germination of seed corn, our immense warehouse was filled to its capacity with the cream of the fields. Never have we had better corn than we have today.

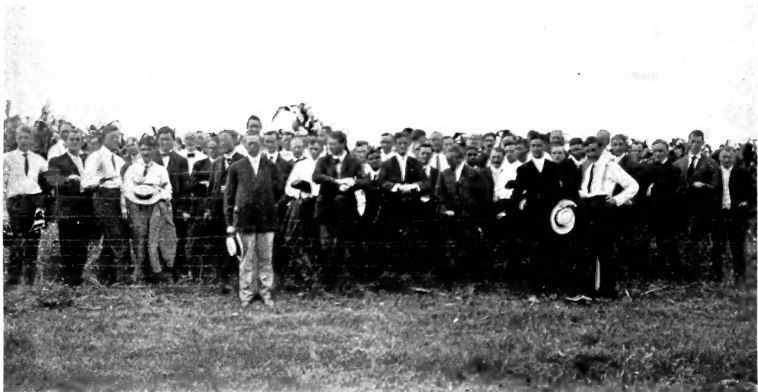
The germination is as perfect as it is possible to get corn to grow.

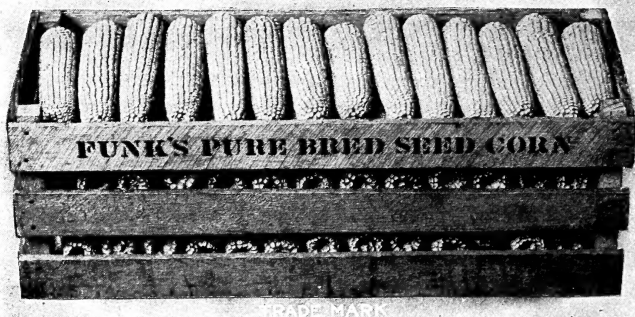
If method and system can produce good seed corn, ours is the best in the world. We want you to mail us the postal card you will find in the back of this catalogue and let us send you a sample of the real thing. When you get this sample, give it a thorough test for germination and see for yourself if our claims are not vindicated.

We believe in a reciprocal policy, you help us and we will help you. Both requirements are met when you plant our seeds. We can increase your yield of corn from 10 to 40 bushels per acre. Try us.

To our old customers, we say: It is time to change your seed. Our advances in new methods will give you a better article than we have ever before been able to give you.

Our policy of "The square deal" will at all times be uppermost in our minds. You may depend upon it that we want no dissatisfied customers, they are the poorest advertisements in the world. What we do want is to give complete satisfaction to every one. We wish to call your attention to our guarantee of satisfaction or money refunded; by reason of which, you run no risk





whatever. All we ask is that you give each package a thorough examination and if not found perfectly satisfactory, return to us at once at our expense.

We want you to take advantage of our offer expressed on the last page of this catalogue, that is to send to us the accompanying post card, upon receipt of which, we will send you a sample of any or all varieties of our corn.

When you get this sample, take an old cigar box and fill it with sawdust, moisten the sawdust thoroughly and put 50 kernels from this sample in the sawdust, point down. Then take this improvised germinator to the warmest place in the house or at least to some place where the temperature does not go below 45° or 50° at night nor above 80° or 90° in the day time. Let it stay there from seven to eight days, BUT DON'T FORGET TO MOISTEN THE SAWDUST EVERY OTHER DAY.

At the end of the seventh day, count the kernels. If the temperature has been fairly even and at no time too low, at the end of the seventh day, all but one or two kernels should have sprouted. Do not expect every kernel to grow because we doubt if there is any man in the world who has seen several thousand samples (and this is the number we will send out) germinate 100% strong. But if the temperatures have been uneven or the corn allowed to freeze, send to us for a fresh sample.

If you have some of your own seed corn already picked out, take 50 kernels from 25 ears and test them at the same time. We want you to compare the results.

And now here is another thing, when you have placed your order with us and received the bags or crates of corn, whichever it may be, we want you to take 50 or 100 kernels from these bags or crates, and give them the same test that you gave the first sample. If the results are not just as good or better than the original sample, send the whole thing back to us. Don't plant it. Is that a square deal or is it not? Give us the answer after you have made the test of the original sample.

There is much more to be said concerning our seed corn further on but right here we want to impress upon you the fact that IT GROWS.

Breeding, selection, curing, storing, butting, tipping, grading, hand picking, everything, would be absolutely worthless, if the germ lacked that little vital spark called LIFE. But our seed corn has it and has it big. See for yourself.

FUNK BROS. SEED CO.,

January 1, 1908.

Bloomington, Illinois.

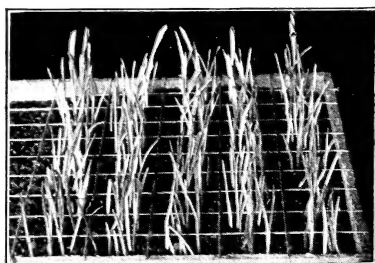
M O R E C O R N

IN ANSWER to numerous requests from our patrons, we have undertaken, in this little book, to compile the results obtained not only from our own experience but from the best work of others in the effort to produce better corn and more of it, including all phases of the work from the first testing of the seed up to the final gathering and storing. We hope that our efforts will meet with your approval and that after reading this book you will join with us in helping to produce two nubbins where only one grew before.

TESTING FOR GERMINATION

If there were only one point in seed selection to be considered, that point would necessarily have to be germinative power, for what would be the value of size, shape, uniformity, type, breeding for high yield, or the value of anything, in fact, if the grain were not able to show life and reproduce itself.

However, there are a number of ways of testing seed corn. Some recommend the individual ear test; some condemn that as unnecessary and unreliable. Some assert that all that is required is to "look at the germ," in the belief that by the color of the embryo, they can tell whether a kernel will grow; others claim that the knife test, supplemented with a test of a composite sample of several hundred kernels, is the most satisfactory.

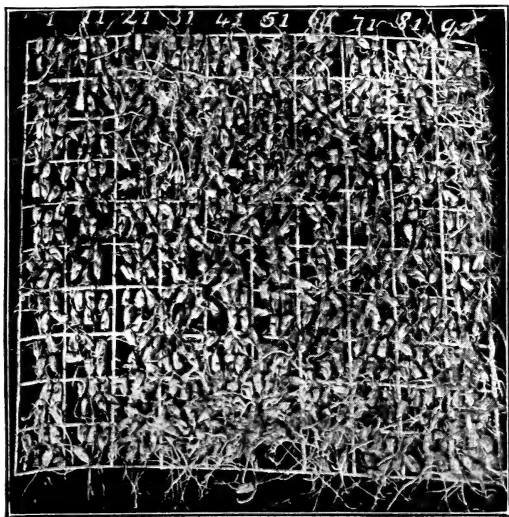


Perfect and Uniform Germination

Our own experience has been that the best way to insure a perfect stand in the field the next year, is to pick the seed corn at such a time that the germinative power is at its highest and then to HOLD it at that until time for planting.

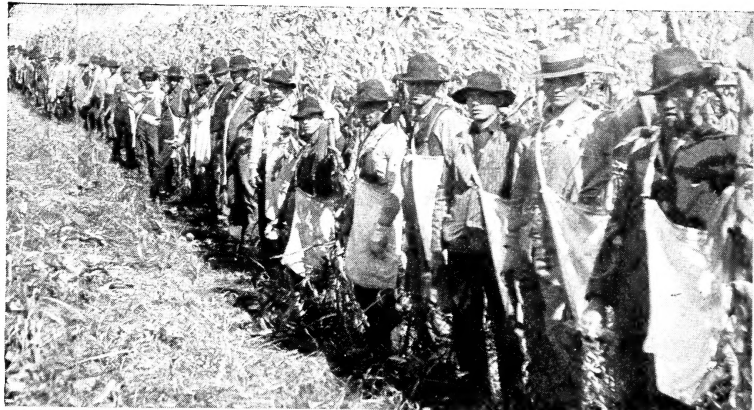
In all of Nature's work it is easy to be seen that the time she has selected for anything to reproduce itself with the greatest vigor and strength, is when it reaches maturity. Earlier than that, immaturity causes weakness; later, deterioration leads to sterility and lack of vigor.

Fifty ears of corn picked at the same time, when thoroughly dried by artificial heat under the same conditions of temperature and circulation of air, showed not one iota of difference in their germinative power, six kernels from each ear germinating in the same length of time and developing the same length of sprouts.



Poor and Uneven Germination

On the other hand, ears gathered at different periods during the harvest, showed a wide variation in their vigor of growth, some sprouting in four to five days, others in six, seven and eight, and many not at all.



THE PICKING SQUAD

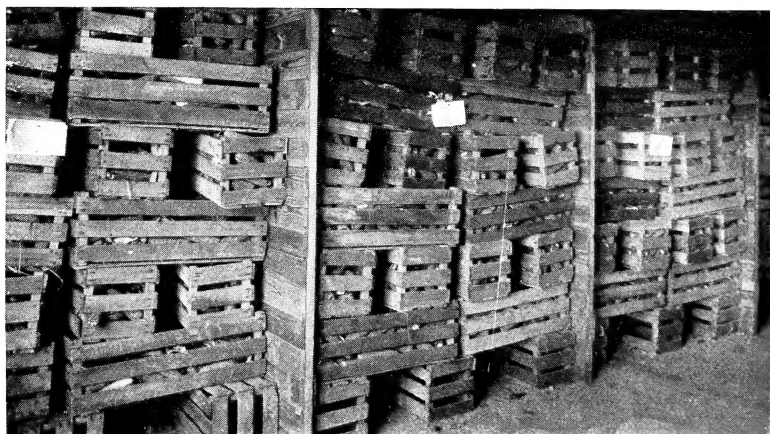
For this reason we decided to pick all of the seed corn which we offer to our customers at a time when there was no danger of frost and when the kernels had reached that stage of maturity which produces the most vigorous growth.

To do this, it was necessary to send men into the field to pick the mature ears. Each man carried a bag over his shoulder and was told to pick **ONLY** mature ears and he was further instructed to select ears growing under certain conditions which will be described later.

Of course it was necessary in the next step, to be prepared to **HOLD** this germinative power until the time when our customers are ready to plant.

Our past experience had taught us something in regard to drying seed corn by artificial heat and this we applied in the construction of a dryer that received this corn direct from the field and reduced the moisture content from 35% down to 10% in three days' time, without injuring the germination in any way.

We had already proven by experiment that **QUICK, ARTIFICIAL** drying of seed corn not only **HOLDS THE GERMINATIVE POWER AT**



ONE END OF THE DRYER

ITS MAXIMUM STRENGTH BUT BY REASON OF ITS QUICKER AND STRONGER GERMINATION IN THE FIELD, ACTUALLY CAUSES AN INCREASE OF TEN TO FIFTEEN PERCENT IN THE YIELD PER ACRE,

Deterioration in the germinative power of corn is often caused by the moisture contained in the corn freezing and bursting the life cell.



INTERIOR VIEW OF WAREHOUSE

This danger we have removed at the very beginning by taking out the moisture and have further guarded against it by storing all seed corn in our warehouses where the temperature never falls below 40° Fahrenheit.

This system of drying must not be taken to be antagonistic to Nature's own way, because on the contrary it is only assisting her in the very work that she would perform were the season a few weeks longer in duration. That we do it quickly is because we have found that the sooner the corn is dried, the more completely is the germination held at its maximum strength.

But to continue our discussion of germination tests, Prof. Holden, Iowa State College, in his "A B C of Corn Culture," gives the following methods of making individual ear tests.

HOW TO MAKE THE GERMINATION TEST

"Use a box four or five inches deep and about two by three feet in size. Fill the box about half full of sawdust or moist earth, packed down firmly so that it will leave a smooth, even surface. In case sawdust is used (and I prefer it to anything else) it should be placed in a sack and set in a tub of warm water for half an hour so that it will be thoroughly moistened before using. Take a piece of white cloth about the size of the box, rule it off checker-board fashion one and one-half inches each way. Number the checks 1, 2, 3, and so on, and place it on the sawdust in the box and tack to the box in the corners and edges sufficiently to hold it to its place. Lay out the ears of corn to be tested side by side on the floor in rows, and drive two nails at the end of the rows to hold the ears in place; remove one kernel from near the butt, middle and tip of the ear; turn the ear over, and remove three kernels from the opposite side in like manner, making six kernels in all, thus securing a representative sample from the entire ear. Place the six kernels at the end of the ear from which they were taken. Use care that the kernels do not become mixed with the kernels from the ear next to it. After the kernels are removed boards may be laid over the rows of corn to keep the ears in place until the germination is known. Place the kernels from ear of corn No. 1 in square No. 1 of the germination box, from ear No. 2 in square No. 2, and so on with the kernels from all of the ears; then place over this a cloth considerably larger than the box, cover with about two inches of moist sand, dirt, or sawdust, and keep in a warm place where it will not freeze. There is no place in the house too good for this germinating box.

"In about eight or nine days, when the stem sprouts from the most vigorous kernels are about two or three inches long, the covering should be removed, care being taken not to misplace the kernels. (A piece of cloth spread over the kernels before the covering is put on will prevent the kernels from sticking to the upper cover.) Now make a thorough study of the six kernels in each square in the germinating box, and carefully note those which either failed to grow or are weak, showing low vitality.

"For example, the six kernels in square No. 44 failed to grow; one or more of the kernels from ears Nos. 1, 2, 4, 10, 18, 20, 21, 36, 41 and 47 failed to grow. These ears should be discarded. Ears 32, 46, and 29 are illustrations of weak ears. Do not fail to throw out all such as these. If the conditions are unfavorable they will fail to grow, or growing, will produce only weak stalks, bearing nothing or only small inferior ears. Nos. 3, 34, 35, and 45 are especially vigorous, and will give a good stand of ear-producing stalks."

We may summarize this chapter by saying, however, that it has been our experience that seed corn picked at the proper time and given the proper care in curing and storing, need not be subjected to the individual ear test, but should be given a composite test to make sure that no mistake has been made in the time of picking nor the manner of curing and storing.

Seed corn picked late in the season, and especially after a hard freeze, should first be given a general test and then if the germination falls below 95%, each individual ear should be tested separately.

GRADING FOR UNIFORMITY

Even after seed corn has been tested for germination and the percentage of strong growing corn shown to be 95% or better, another step is necessary to insure the best stand in the field. This is grading to a uniform size to make the work of the planter more regular in dropping a certain number of kernels per hill.

If the number of missing hills and the hills containing only one stalk could be reduced to zero or in other words if every hill of corn planted grew two or three stalks of corn instead of sometimes only one, and too often none at all, the increased yield would amount to from five to forty bushels per acre. Missing hills and hills containing only one stalk are present in your corn field for two reasons: first, because of poor germination; and second, because your seed corn was not sufficiently uniform to make your planter drop the same number of kernels in each hill.

You have seen corn planters on exhibition at fairs and other places that dropped two or three kernels at every drop with absolute accuracy. If you took any particular interest in it, it didn't take you long to discover that the reason for this was that the kernels were all of a uniform size and shape. If you had taken two or three ears of corn and shelled them butts, tips, and all, right into the planter box, do you suppose that the planter would have gone on dropping twos or threes with perfect regularity? Neither can you expect to go into the field and get a perfect stand if your seed corn is not absolutely uniform in size and shape.

PROF. P. G. HOLDEN, IOWA STATE COLLEGE, says:

"Ears to be used for seed, should always be butted and tipped. This is done for two reasons: In the first place, butt and tip kernels produce less than middle kernels, and in the second place, they are so irregular in size and shape that the planter cannot drop them evenly."

Prof. A. T. Wiancko, of Purdue University Experiment Station, in Bulletin 110 gives the following table showing the difference in the regularity of the planter drop when only the middle kernels were used and when the whole ear was shelled:

No. of Kernels Dropped	Middle Kernels Only	Whole Ear	Deep and Shallow Kernels Mixed	Deep Kernels Only	Shallow Kernels Only
1		1 time			2 times
2	8 times	6 times	5 times	4 times	2 times
3	92 times	66 times	75 times	92 times	95 times

This shows that regardless of the size or shape of the kernel, the drop was from 25% to 30% better when there was uniformity than when different sizes and shapes were mixed together.

When this irregularity actually occurs in the field, it makes a difference in your yield of 10 to 20 bushels of corn per acre.



BUTTING AND TIPPING BY MACHINERY

After the seed ears have been butted and tipped, and shelled from the cob, the seed corn should be subjected to another process in order to make the middle kernels more uniform in size and shape. This consists in passing them over a set of double screens in order to remove the extra small kernels. All of our shelled seed corn is passed over two sets of double screens for the above reason, and all irregular kernels are in this way removed.

Butting, tipping, and screening, however, cannot eliminate some of the cracked or damaged grains that are present in even the best of ears. These must be taken out by hand, as only the human eye can detect their presence.



HAND PICKING

When this last step has been completed, there is but one more test to make and that is of the planter itself. Jack the planter wheels up from the floor in order to gain free movement. Fill the planter boxes just as you would in the field. Then begin checking out the kernels to obtain the correct num-

ber per hill. By changing plates and adjusting the planter properly, you will be able to obtain the correct number of kernels ninety or more times out of a hundred if your seed has been prepared as described on page 7.

PLOWING, PLANTING, AND CULTIVATING

The territory into which this little booklet goes is too diversified to admit of any fixed rules in regard to the best methods and best implements for plowing, as we have customers and friends in every State in the Union.

There are a few principles, nevertheless, which are applicable in all localities.

In two fields of equal strength of soil, one fall plowed, the other spring plowed, the fall plowing will nearly always make the best yield of corn.

Data gathered from many experiments shows that from $3\frac{1}{2}$ to $5\frac{1}{2}$ in. is the most profitable depth to plow.

Too much stress cannot be laid on the preparation of the seed bed. Too often the seed bed is poorly prepared and the ground lumpy and cloddy. If it is impossible to break all the clods and lumps, at least get them on top of the ground, but let the seed bed underneath the surface be as fine as an onion bed, or as fine as you can make it. When the little corn roots begin to feel around for something to live on, they find plant food that is immediately available and respond accordingly in their more rapid growth and development.

Depth of planting depends entirely on the season. In cold, wet seasons, plant shallow so that the kernels of corn will be in the warmest portion of the seed bed. The temperature of the soil varies from 10 to 30 degrees Fahrenheit in the first three inches. In hot, dry seasons, plant deep to obtain moisture for the sprouting kernel.

A cultivation with a weeder or harrow before the corn is through the ground is often desirable, if the field is weedy or if a hard crust has been formed by a hot sun after a beating rain. Many good stands of corn are ruined on account of a little lack of care just at the critical stage. The old question of surface vs. shovel cultivators seems to have sifted down to surface or shallow cultivation vs. shovel or deep cultivation and seems to be not so much a question of implements as of their proper use.

Authorities and experimenters differ somewhat as to the results obtained. PROF. C. C. GEORGESON OF THE KANSAS STATION says:

"Our experience also seems to indicate that it is not best to pin one's faith strictly to the shallow cultivation. A judicious mixture of deep and shallow cultivation gives better results than to continue either throughout the season."

Experiments at North Dakota Experiment Station and at the Illinois Experiment Station showed somewhat better yields for early shallow, and later deep cultivation.



Continuous shallow cultivation at Illinois gave the largest yield, but the cultivation was continued late in the season.

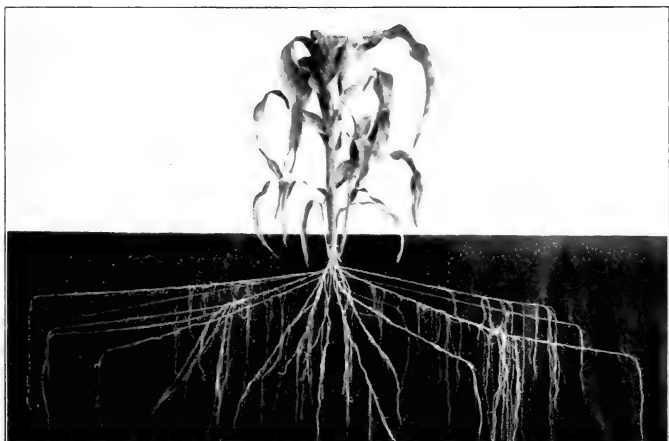
PROF. P. G. HOLDEN OF IOWA STATE COLLEGE says:

"Cultivation should be level and frequent when the corn is small. It may be deep at first but must be shallow later."

PROF. A. M. TEN EYCK OF THE KANSAS AGRICULTURAL COLLEGE, says:

"Too deep cultivation not only injures the corn by destroying the roots, but during the period of cultivation it prevents the roots from feeding in the most fertile part of the soil. On the other hand, the practice of shallow cultivation may be carried too far. A relatively thick mulch of mellow soil will conserve more moisture than a thin mulch, as shown by Prof. F. H. King, in his experiments at the Wisconsin Experiment Station.

Many farmers prefer to cultivate corn deep the first time, on the principle that the corn roots are not injured by deep, early cultivation, and that deep cultivation warms the soil and causes the roots to strike downward. Corn may be cultivated deep and close to the hill when the plants are small without injury to the roots, but the deeper cultivation may not warm the soil so deeply or so rapidly as the shallower cultivation. Mellow soil is not so good a conductor of heat as firm soil, and less heat may enter the ground through a thick mulch of mellow soil than through a thin mulch, while the thinner mulch may be practically as effective for retaining the heat in the soil as the thicker mulch. Also, a deep soil mulch may not be necessary for conserving soil moisture in the early spring, when the air is moist and the weather relatively cool. Thus the cultivation early in the season may be rather shallow and the depth of the cultivation increased as the season advances. Late in the season, during the hot, dry weather of July and August, a deeper soil mulch may be required to conserve the moisture in the soil.



A study of the root growth of corn has shown that the main lateral roots lie about four inches below the surface of the soil between the rows. The roots gradually approach the surface near the root stalk or crown, which requires that level-planted corn should not be cultivated close to the hill the last time.

The primary object in cultivating corn is to increase the yield and improve the quality of the crop. Other objects are to prevent weeds from seeding, so that land may not become foul, and to maintain the tilth and fertility of the soil with reference to the growing of future crops.

The average farmer in cultivating corn has usually mainly one object in mind, namely, to kill the weeds, and this is in fact a very important purpose of cultivation. But the soil needs cultivation for other important reasons. Early in the spring, when the ground is compact and full of moisture, cultivation warms the soil by decreasing the evaporation which absorbs heat, and the mulch of mellow soil acts also as a blanket to prevent the rapid radiation of heat from the soil. The loosening of the surface soil to form a soil mulch conserves the moisture in the soil and offers also the most favorable surface to catch and store the rain. By reason of the stirring and the mellow surface the soil is aerated, the foul gases arising from decaying organic matter are removed and life-giving oxygen is supplied to the soil bacteria and to the growing plant roots. And more than this, the fertility of the soil is developed by cultivation. The store of plant food in the soil is largely in an unavailable condition; before the potash, phosphoric acid, and nitrogen become soluble and thus available to the plant the soil must pass through a stage of disintegration and chemical change, which can take place only under favorable conditions, in the presence of moisture, heat, and air, factors which are largely controlled by cultivation, soil and climatic conditions being similar.

There are perhaps no exact rules or methods for cultivating corn, but a farmer observing the crop and soil conditions and understanding the principles of soil cultivation may vary the manner and practice of cultivation somewhat to suit the conditions and accomplish the objects desired. It is a safe rule to follow, and usually pays well, to prepare a good seed-bed and give the land thorough cultivation previous to planting."

Breeding Methods

THE ONE GREAT RESULT TO BE OBTAINED IN BREEDING CORN IS INCREASED YIELD. All our efforts in breeding for many years have been for this one object. Every record we take, every move we make, is to produce a strain, by selection or crossing, that will give higher yields and better quality than we have previously attained.

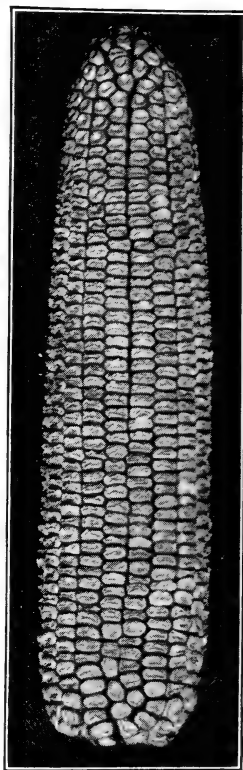
As is well known, plants inherit weakness or strength from their parents. The entire product of every corn plant depends upon two principles:

1. The Inherent.
2. The External.

Of the external, we as breeders have naught to do except to find a normal condition. It devolves upon the corn grower to make this external influence as favorable as possible.

The inherent quality of every plant is dependent upon its ancestors. To find single, or unit characters, that in one way or another tend to greater production and strength, to combine them with other characters in other plants that give the same result, the controlling and selecting of characters,—this is the work of the corn breeder. It is not an easily performed nor a briefly explained task. However, our work may be summarized under the five general headings of:

1. **Selections of single ears giving high yield.**
2. **Proving that these ears transmit this quality to their progeny.**
3. **Mating the ears that give best result in above test.**
4. **Mating individual plants that have the same or differing strong characters.**
5. **Selecting from these matings, progeny that proves true in retaining all strong characters.**



This Perfect Ear, No. 651, Produced at the Rate of 84 Bushels per Acre

To determine the yielding strength of selected ears, we plant several breeding blocks, containing about 80 ears each from every variety.

These 80 ears are planted in individual rows—one ear to each row. Record of their every performance is kept and each row is harvested separately and the champion yielding rows found.

The following is a record of live rows in Funks Yellow Dent Breeder's Block No 3, showing one champion yielder, three that were discarded, and one check row:

Row No.	Ear No.	Strain	No. Standing Stalks	No. Down Stalks	Total No. Stalks	Total No. Hills	Stalks per Hill	No. Ears Harvested	Average of Corn production per plant in ounces	Lbs. Corn Harvested	Rate of Yield per Acre	Selected
47	0 647	0 205	115	5	120	48	2.45	125	16.6	124	130	Ch.
48	0 648	0 101	111	10	121	47	2.57	107	12.8	97	106	No
49	0 649	0 205	100	2	102	44	2.5	102	14.1	90	101	No
50	Check 0	Check 0	97	5	102	46	2.22	102	13.32	85	94	
51	651	120	96	1	97	45	2.15	84	10.25	75	84	No

This is an actual sample of our harvest record. The other records do not concern us here.

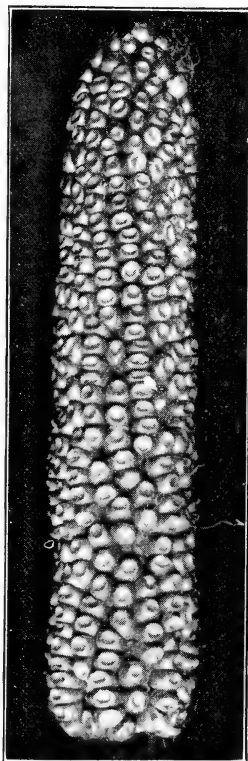
Three kernels were planted by hand in each hill. In figuring the yield we take the actual number of hills. All check rows in the Funks Yellow Dent Breeding Blocks were planted from a composite sample of stock seed.

In planting each row from an individual ear, only $\frac{1}{2}$ of the kernels are used.

During the seven years of our breeding operations, we have identified strains of corn that every year give a higher yield than other strains. These strains all originated from a single ear. By tracing back the performance record of these different strains, we are able to select those that, as stated under heading No. 2, prove their ability to transmit their high yielding quality to their progeny.

As above stated, only one-half of each ear is planted in the "regular breeding block." If at harvest a certain mother ear proves herself to be a higher yielder, we have one-half of the kernels to plant the next year. This we do, as set forth under heading No. 3, bringing together in a small breeding block all the champion yielders of the previous year with each variety. These "Champion Blocks" are planted with one ear in each row, three kernels to the hill, etc., identical with the "regular blocks," and we detassel one-half of every row, alternating the detasseled end. For instance, the south one-half of all even rows and the north one-half of all odd rows is detasseled, as well as any apparently weak plant in the row. This method of detasseling is followed in the "Regular Breeding Blocks" and in all the other "blocks" to prevent self-fertilization, which, where it occurs has been proven to be disastrous to the future yielding power of the corn.

In the "Champion Blocks" when we bring the very highest yielders together and use one-half of each row for dams, and one-half for sires, we are insured that every kernel produced not only comes from a high yielding dam, but also from a high yielding sire.



This Hand Pollinated Ear, No. 647, Produced at the Rate of 130 Bushels per Acre

The following is a copy of three rows of the Champion Boone County Block Harvest Record:

Row No.	Ear No.	Strain	No. Standing Stalks	No. Down Stalks	Total Stalks	Total Hills	No. Ears Harvested	Average Plant Production in oz.	Lbs. of Corn Harvested	Yield, Bu. Per acre	Selected
3	0 603	0 103	154	8	162	57	177	19.4	197	174	Ch.
7	0 607	Ph135	144	6	150	59	152	18.9	178	151	
10	Check	Check	127	6	133	56	123	14.9	124	116	

We accomplish heading No. 4, the mating of individual plants showing strong character, by hand pollination. Having selected two plants from different rows which we wish to mate on the dam plants, we cover the young "shoot" before silk appears with a bag impenetrable by the corn pollen. On the sire plant we cover the tassel before it ripens. In about three days silks have appeared on the dam, and pollen is falling from the sire. We have conserved all of their pollen to use on the protected silks. After the pollen has been carefully powdered over the silks, the bags are again tied on both ear and tassel as before and this "Hand Pollination" is then performed three times. Finally when matured, if the dam proves to produce a large ear and if the sire plant does likewise, we have reached the climax of corn breeding as we know it today, which is amply proven by the following:

In one of our breeding blocks we planted 38 ears that took the first prize at the Illinois State Fair of 1906 in the class "Yellow Corn Open to the World." These ears were the finest SHOW SPECIMENS we ever saw. They were Funks Yellow Dent.

In this block were also 69 "regular" Breeding ears, 26 Hand Pollinated ears and 15 check rows, the check rows being planted from a composite sample of third generation seed.

The summary of this reads:

KIND OF EARS	Yielded More than Check Rows	Yielded Less than Check Rows	Per cent Yielding More than Check Rows
38 Prize Winning Show Ears....	15	23	39.4%
69 Regular Breeding Ears.....	35	34	50.7%
26 Hand Pollinated Ears.....	16	10	61.5%
133 Ears—Total	66	67	49.6%

These results encourage us to renewed efforts.

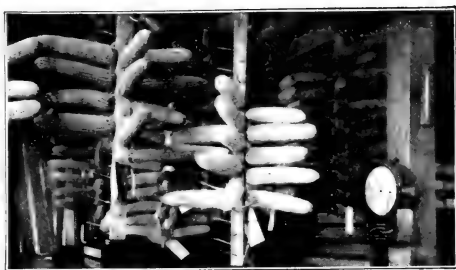
We have not reached the end by any means.

"Ears of corn are not always as valuable as their appearance would indicate. Excellence may be inherent or extraneous. An ear of corn which is good because of inheritance is much more to be desired than one which is superior under especially favorable surroundings. As ordinarily selected from the shock, wagon, or crib, a very large per cent of seed ears are excellent because they have grown under much more favorable surroundings than the average. Indeed, it is probable that if we could follow each of these choice seed ears back to the field where they grew we should find 80 to 90 per cent of them growing one plant per hill—their superiority clearly due to the fact that the mother plant had the food, sunlight, and moisture of two or three plants poured into it."

C. G. WILLIAMS,

Circular No. 1, Ohio Experiment Station.

All authorities are agreed on one point, that seed corn should be picked as soon as mature and before there is any danger of damage to the germination by reason of frost. The time for picking varies in different localities and according to the variety of corn that is being grown.



For the past two years, killing frosts have occurred from the 9th to the 12th of October throughout the central and northern portions of the Corn Belt, which goes to show that the best time to pick seed corn is between the 1st and 10th of October. This cannot be made a fixed rule, owing to the difference in seasons.

Seed corn should not be picked when the corn is still immature as this results in low vitality and lack of vigor in the plant growth.

It will be found to have the strongest germination and greatest growing vigor, if the seed is picked just after the husk has turned color, and the kernels are dented and hard

One should go into the field with the idea of selecting not the largest ears he can find, but the **LARGEST EARS GROWING WHERE**

THERE ARE TWO OR MORE STALKS IN THE SAME HILL. The large ears growing in hills where there is but one stalk have no claim on the right to be chosen as seed ears. Only ears that show by their size that they are able to reproduce themselves under



adverse conditions are worthy of a place in the planter box. These ears show that it is their inherent tendency to produce large yields.

Don't expect to find one of these ears in every hill. If you find sixty ears to the acre, you may consider yourself very fortunate.

Select ears that are growing on well developed plants. The picker should try to observe some uniformity in the height of stalk, uniform placement of ear and any special characteristics, such as large leaf development, size of shank, etc. Uniform early maturity is one of the first requirements, not alone for the reason that the ears selected may cure better but that we may benefit by the inherent tendency of the ear to produce an early maturing corn. The superiority of this method of selecting seed ears from the stalk rather than from the wagon box or elevator dump is best demonstrated by some



experiments conducted by Prof. C. G. Williams of the Ohio Agricultural Experiment Station, an account of which is given in Circular No. 71 as follows:

Plot No.	METHOD OF SELECTION	YIELD PER ACRE IN BUSHELS
49	Ordinary	68.64
50	Plant	76.57
51	Plant	70.56
52	Ordinary	68.53
55	Ordinary	69.07
56	Plant	71.43
57	Plant	71.43
58	Ordinary	70.82

Average of plant selection plots 72.49
Average of ordinary selection plots 69.26
Gain for plant selection 3.23

If there were no other point in favor of our corn picked by the plant selection method, this alone would be worth \$1.50 per acre or \$9.00 on every bushel of corn purchased from us.



It has been our experience and that of the best investigators in this line that the more quickly seed corn can be dried after picking the stronger and better the germination. The technical reasons for this have not been fully worked out, but results have proven that artificially dried corn produces not only a quicker and stronger germination, but actually more bushels of corn per acre in the crop grown from it.

The following table shows the results in yield per acre from seed dried by different methods and under different conditions:

METHOD OF DRYING	Yield Per Acre
By Artificial Heat	77.1
Without Heat	68.2
Selected from Crib	39.2
Selected from Shock	32.0

Gain of fire dried seed over air dried seed 8.9 bushels per acre
Gain of fire dried seed over crib selected seed 37.9 bushels per acre

When corn is once thoroughly dry, it may be stored in a well ventilated room until wanted for planting. Corn containing not more than 6% to 8% of moisture is in no danger from freezing weather. If left subject to a moisture laden atmosphere, it will very likely absorb enough moisture to injure it in severely cold weather.

We have endeavored in the foregoing pages to give as much information in regard to successful corn growing, as can be done in a limited space, and we sincerely hope that you will find some points of interest and information that will induce you to become a grower of better corn and more of it.

FUNKS YELLOW DENT

(Bred from J. L. Reid's Yellow Dent, but improved both in yield and feeding value)

Performance Record of some of the progeny of Ear 0205

	1903	1904	1905	1906	1907
Ear No. 0205 Yield 122 bu. per Acre	{	Ear No. 0323 Yield 126 bu.	Ear No. 0470 Yield 125 bu.	Ear No. 0524 Yield 140 bu.	Ear No. 0612, yield 106 bu. Ear No. 0636, yield 140 bu. Ear No. 0638, yield 120 bu. Ear No. 0648, yield 110 bu. Ear No. 0654, yield 119 bu.
		Ear No. 0307 Yield 114 bu.	Ear No. 0444 Yield 120 bu.	Ear No. 0503 Yield 126 bu.	Ear No. 0603, yield 111 bu. Ear No. 0601, yield 106 bu.
		Ear No. 0378 Yield 114 bu.	Ear No. 0441 Yield 122 bu.	Ear No. 0581 Yield 116 bu.	Ear No. 0613, yield 106 bu.

Owing to the superiority of strain 0205 over all other strains which we are able to offer the seed buyers this year, we have limited our sales of this variety to this one strain exclusively, believing that it will give the best results.

OUR STOCK IS LIMITED

If you have planted any of our other strains of this variety we would advise you to discard them and plant 0205 this year. The increased yield will more than repay you.

This is now the most popular variety grown in the Corn Belt.

We have bred this variety up in chemical content until it approaches a balanced ration.

As a high yielding variety under all climatic and soil conditions, it has proven to be the best that has yet been produced.

Strain 0205 is the highest yielding strain of the highest yielding variety.

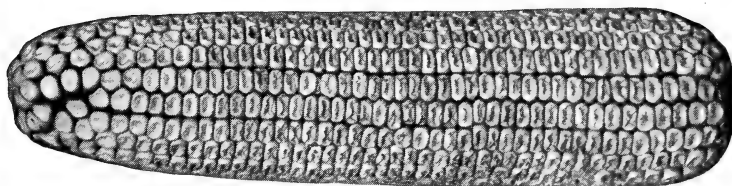
Never in the history of corn improvement has a grade of corn even approaching this in excellence been placed on the market. Never have you, or has any one else, been offered such quality in seed corn as we now place before you. This is an opportunity that no corn grower can afford to miss.

You can do as well as the man who raised the corn shown in the following photograph, IF YOU PLANT THE RIGHT KIND OF SEED.



This field of Funks Yellow Dent, Strain 0205, measuring 23.5 acres, produced 2540 bushels of shelled corn or more than 108 bushels per acre

Funks Yellow Dent



Description

Ears 8 to 11 inches long, 7 to 8 inches in circumference, 18 to 24 rows of kernels, each row containing 50 to 60 kernels. The cob is small and carries a large amount of corn, shelling 88 to 90 per cent grain. Medium early maturity, requiring from 110 to 120 days to fully mature, stalks 8 to 12 feet high, heavy below the ear making it very resistant to the heaviest wind storms.

Owing to the fact that this corn is selected from detasselled stalks, it is very vigorous and stands the most severe droughts.

Its adaptability to any soil or climate makes it a corn of which it has been said, "NO corn grower will make a mistake if he plants Funks Yellow Dent."

Combine these features: the highest yielding variety; the highest yielding strain of the highest yielding variety; ears selected from the stalk and not from the wagon box or crib; corn picked before October 15, fire-dried and stored in a heated seed house; ears re-selected for type, size, and vigor after being dried; shelled corn butted and tipped before shelling, thoroughly screened and graded to provide uniformity; kernels hand-picked to remove any damaged, broken, or irregular grains. What corn do you know of that can equal it?

PRICES

On the ear in crates - - - \$5.00 per bushel.

Shelled and in bags - - - 2.50 per bushel.

See the "easy to order" blanks for quotations on larger quantities.

"If seed corn must be purchased, the price should be least considered. Corn that will yield five bushels more to the acre is worth easily \$10.00 more per bushel."

A. T. WIANCKO, Purdue Experiment Station, Bulletin 110.



THIS IS A PHOTOGRAPH OF A TYPICAL BUSHEL OF FUNKS YELLOW DENT.

To Increase the Yield per Acre

WE HAVE

- 1 Selected from the highest yielding strains from the highest yielding varieties.
- 2 Eliminated the barren stalks.
- 3 Selected seed ears from the stalk, not from the wagon box.
- 4 Employed a system of drying that insures a high germination and vigorous growth.
- 5 Stored the seed under ideal conditions to preserve high germination and vigor.
- 6 Butted, tipped, and hand picked the corn, to provide uniformity, because uniformity combined with high germination means the perfect stand, and backed by breeding and selection, the maximum yield.

In fact we have done everything to make the PERFECT SEED CORN—more than has ever been done before.

I desire to say that I am more than pleased with the Funks Yellow Dent Seed Corn I purchased from you last spring. I know it will be one-fourth better than last year when I used home selected seed.

CHAS. F. FRIEND, Saidora, Ill.

I have made it a practice for several years to purchase seed corn of you. Last year I bought four bushels at five dollars per bushel that planted 20 odd acres. It did well, as your seed has always done for me. I have picked enough seed out of that 20 odd acres to plant 200 acres next year. Next year I will purchase pedigreed corn of you again and pick my seed out of that for the following year. I find this method pays me for I am getting the benefit of the experience and outlay that you are put to in producing well bred corn. Last spring I gave 37 boys of this township one ear each of pedigreed corn.

JOE FRY, Wever, Iowa.

I reply to your query, as to whether I was benefited by the purchase of seed corn I bought of you. Yes, I consider that as being the best investment I ever made. This is the third year I have raised your Funks Yellow Dent, and I consider it the best corn I ever saw. Your Funks Yellow Dent made a greater yield and a better quality of corn for me than any I have ever raised.

A. J. TAYLOR, Muncie, Ill.

Buying your corn at \$5.00 per bushel was the best investment I ever made. I am pleased with the results. I think that it will pay any farmer to buy Funk's pure bred corn.

JACOB RANG, Mabel, Ill.

Your seed corn did not look as fine as expected last spring, but results have been very satisfactory. We had a fairly good crop, have not husked any "Funks Yellow Dent" yet, but suppose the larger part of the crop would make 75 to 78 bushels per acre. On last Wednesday our County had a corn show at the County seat; 67 different lots were exhibited and I got the sweepstakes with ten ears raised from the bushel of ear corn, hence it was a profitable investment.

TASSO TERRELL, New Vienna, Ohio.

Answering your inquiry about seed corn I bought this year, it yielded well and matured in 110 days.

C. B. ALLEN, Nauvohew, Miss.

I take measure in recommending your Funks Yellow Dent. I planted 40 acres of it this year and will harvest the best crop of corn this fall that I have had since I started farming.

CLARENCE SCHAFFNER, Mt. Pleasant, Iowa.

I will answer your question as to what success I had in growing your seed corn. Last year I got some crate corn of you and liked it so well I discarded every other kind from my fields. This year I sent for one bushel of your \$5.00 a bushel corn and planted it. I have not gathered it yet but think from the looks of the field that it is fine, and that I am well pleased with the purchase. I am more than pleased that I planted Funk Bros. Seed Corn.

CHESTER M. CLARK, Elliot, Iowa.

I received your letter of inquiry about the seed corn. My success with your seed corn was good this year. I think it pays to raise Funk's pedigreed seed corn as it yields good with a gain of 20% at least over old home grown. I am pleased with Funks Yellow Dent.

CHAS. MASSION, Flanagan, Ill.

Boone Co. Special

AT THE TIME OF PRINTING
THE SECOND EDITION OF THE CATALOGUE
WE ARE
ENTIRELY OUT OF THIS VARIETY

Believing 0103 to be the highest yielding strain of Boone County Special which we can offer our customers this year, we have confined ourselves to this strain and in offering it to you, do so with our strongest endorsement.

General Description of this Variety

A High Yielding white corn of extra large size, ears 8 to 12 inches long, $7\frac{1}{2}$ to $8\frac{1}{2}$ inches in circumference, 18 to 26 rows of kernels. Ears weigh from 12 to 18 ounces when dry. The cob is medium to large and pure white in color. Medium late maturity, adapted for any place south of the 41st parallel.

Boone County Special has proven to be the highest yielding white corn ever produced.

By our work, we have reduced the number of weak and unproductive stalks to a minimum and increased the average size of ear to the maximum.

Our corn is first BRED TO YIELD. The corn we offer you was selected from the standing stalks, not from the wagon, and was picked before October 15.

This corn was dried by artificial heat to HOLD the germination at its greatest vigor, not to mature the corn.

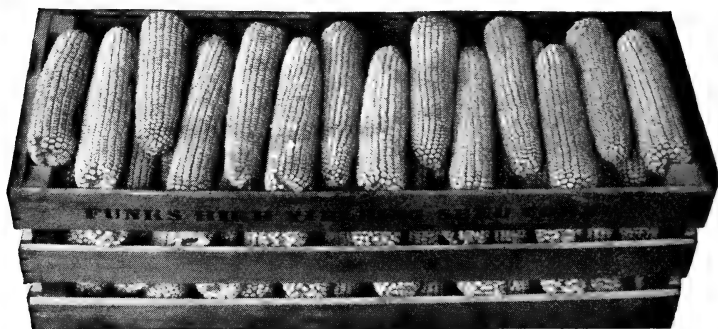
The crate corn is the best that has ever been placed on the market.

The "shellers" are butted and tipped, screened, and HAND PICKED to provide uniformity and to make your "stand" of corn as nearly perfect as possible.

PRICES

On the ear, in crates	-	-	-	-	\$5.00 per bu.
Shelled and in bags	-	-	-	-	2.50 per bu.

See the "easy to order" blanks for quotations on larger quantities.



The above represents a fair average crate of Boone County Special Seed Corn

TO OUR CUSTOMERS:

Funk's Pedigreed Ear Corn and Hand Picked Shelled Corn can be obtained only from this office and from our authorized agents. *OUR SEAL IS ON EVERY PACKAGE.*

Your inquiry of the 22nd inst. is at hand. In reply will say that I have had the best of results with your "Boone County Special" Seed Corn. It will make in the neighborhood of 80 bushels per acre. Will select quite a lot of very fine seed corn. I think it paid me well to invest \$5.00 per bushel in your tested seed. It looked high, but to look at the field of corn, causes me to think that it was a good investment. I can heartily recommend your "Boone County Special" Seed Corn.

W. W. ROYER, Monticello, Ill.

Your letter received a short time ago, inquiring what success I had with your seed corn. Will say in reply that I got a perfect stand of Boone County Special seed and the yield is the very best I have had up to date. It is gratifying to me to recommend your seed.

W. S. HISLOP, Milford, Ill.

The Boone County Special Seed Corn purchased of you is satisfactory in all respects.

FRED YEAGER, Geneseo, Ill.

I purchased of you one bushel each of Funks Yellow Dent and Boone County Special pedigreed \$5.00 seed corn. The Yellow Dent is fine. It has exceedingly few barren stalks. The ears are large and well filled out and the stalks are heavy and well rooted, practically none of them having blown over. The Boone County Special was planted at one side of a field planted in other white corn. It is good heavy corn and a peculiar feature is that a heavy storm in August which blew down much corn in this section had practically no effect on the Boone County Special, while fully two-thirds of the balance of the field is either blown over or tilted. As for the investment I am sure the purchase price will be more than quadrupled in the increase yield of the product over ordinary seed corn.

HENRY STEWART, Prophetstown, Ill.

In reply to your inquiry concerning the seed corn I bought of you last spring, will say that it was entirely satisfactory, and I have raised the heaviest and best crop of corn from your seed that I ever raised in my life. I planted 80 acres of this corn, all on upland and feel certain that it will average from 75 to 80 bushels per acre. I would take pleasure at any time in recommending your seed corn.

T. S. GRAVES, Indianapolis, Ind.

I am well pleased with the seed and with the results I have got. I am saving the seed myself to plant another year. I made better corn than any of my neighbors.

M. D. CARLOCK, Winsboro, Tex.

I consider the money paid for the corn a good investment and wish you success in your further prosecution of improvement in grain, which I consider worthy of the best efforts you can make.

N. T. LAITON, Summit Grove, Ind.

We planted your seed fully one month later than we usually plant it in this country. Notwithstanding the fact that we had four weeks drought, we made 60 bushels of fine corn to the acre, measured weight. This corn was exhibited at the Farmers' Congress and Dr. Knabb of the United States Agricultural Department gave us the Blue Ribbon on our exhibit. Our seed that we have saved to plant next year, ranks, in our judgment, fully as good as the seed that we received from you. The whole process of cultivation and a full report of the same was published in one of our local papers and if I can procure a copy of same, will take pleasure in sending same to you.

W. S. HERNDON, Tyler, Texas.

In reply to yours of the 22nd inst., in reference to seed corn bought of you last spring, will say it was all right. I raised a good crop and am sure money invested in good seed is wisely spent; in fact there are very few farmers who can afford to plant common corn and take the chances of raising a poor crop of corn. Our farmers are becoming interested in pure bred corn and the effect is very noticeable at our local corn shows. The farmers who secure good seed from reliable dealers get the yield quality and quantity and also the ribbons.

WM. WALLACE, Vandalia, Mo.

In reply to yours of the 23rd inst., would say that I have never had better corn on the farm, thanks in a large measure, to the excellence of your seed.

WM. G. HANNISEN, Indianapolis, Ind.

In reply to yours of the 21st as to my success with your seed corn, will say that it is the best corn I have ever grown.

CHAS. SHEPHERD, New Richmond, Ind.

In reply to your question as to whether it paid to plant your seed corn: We had a very unfavorable season for starting a corn crop—cold weather. The result was a thin stand from one to two stalks in a hill. Notwithstanding the drawback of the season, I have increased the yield over the old kind from ten to fifteen bushels per acre, and of a very fine quality. It will pay any farmer to purchase your high yielding seed each season, rather than plant the old kind. I think your seed has increased my income from five to ten dollars per acre.

G. W. CRUM, Arenzville, Ill.

Funks Gold Standard Leaming

WE HAVE found it necessary to prefix our own name to this variety to distinguish it from the many imitations of Gold Standard Leaming which have been placed upon the market in the past six years. OUR Gold Standard Leaming is bred from the original J. S. Leaming corn which was originated in 1826.

AT THE TIME OF PRINTING
THE SECOND EDITION OF THE CATALOGUE
WE ARE
ENTIRELY OUT OF THIS VARIETY

In confining our offerings of this variety to one strain, we believe we are placing before you the best blood of the Leaming corn that has so far been produced.

We have changed the general type of this variety, breeding it richer in color, longer in kernel, and somewhat rougher in seed coat. We have greatly increased its yielding capacity and have increased the oil and protein content until it has become an Ideal Feeders Corn.

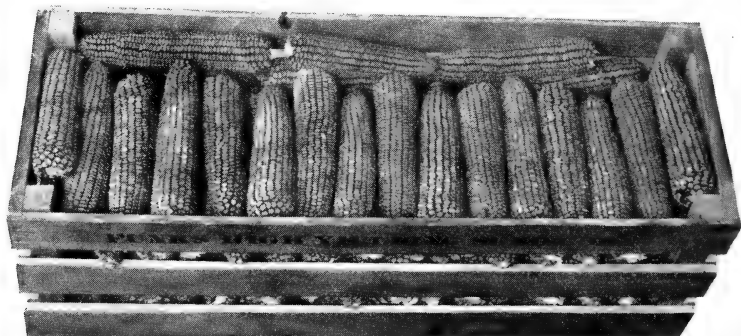
The ears are from 8 to 11 inches long, $7\frac{1}{2}$ to 8 inches in circumference, weighing from 12 to 17 ounces each. The stalks range from 9 to 12 feet in height, with many large, broad leaves, making it the **FINEST CORN FOR SILAGE**,

THE MAN WHO FEEDS CATTLE cannot afford to be without this variety. The medium rough kernel containing the highest percentage of oil and protein make it the most perfect corn for feeding purposes that has been offered by any seedman.

PRICES

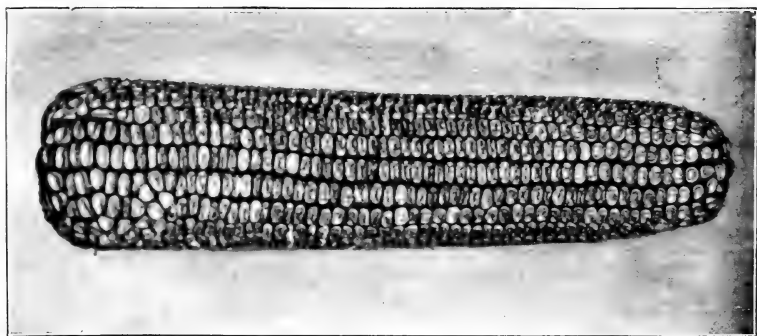
On the ear in crates	-	-	-	-	\$5.00 per bushel
Shelled and in bags	-	-	-	-	2.50 per bushel

See "easy to order" blanks for quotations on larger quantities.



The average seed corn buyer, when purchasing his first lot of seed corn on the ear, is apt to be dissatisfied with its appearance. He expects show ears. He should remember, however, that there are but one or two show ears in a wagon load of corn and that they are worth a great deal more than he paid for his seed.

One show ear at the National Corn Exposition sold for \$250.



AN EAR OF FUNKS GOLD STANDARD LEAMING

In regard to the seed corn I purchased of you last spring, would say that it more than came up to my expectation. One old farmer who was out in the field with me this fall, said that as long as he had lived he had never seen such heavy corn. It certainly pays to breed up seed corn as well as it does to breed up stock. If farmers would wake up and get out of the old ruts and come to a sincere realization of some of these facts, it would mean millions of dollars in their pockets.

CHAS. REDPATH, Marengo, Ill.

I have farmed for twenty-five years and can say that your corn is the best I have ever tried to grow.

L. GERWIN, Gibonsburg, Ohio.

I want to tell you of my success with the seed corn I got of you. The neighbors say it is the best field of corn they have seen and I know by experience it pays to use the best of seed and I think I now know where to get it.

OTTO CAPLE, Rochester, Ind.

The Gold Standard Leaming seed corn bought of you for the last two years has given entire satisfaction and I will order my seed for 1908 of you and of the same variety. I am fully satisfied that it pays to always buy pure bred seed and for that reason prefer to order my seed rather than save it.

CHAS. J. BACK, Chesterfield, Mo.

Yours at hand and in reply will say that the Gold Standard Leaming that I have been getting of you has been satisfactory the past four years. My corn has graded No. 2 on the market.

JOHN E. BASKIN, Tuscola, Ill.

It certainly paid me to purchase your seed and I think you are doing a grand work in the improvement of seed corn.

A. B. MOORE, Chatham, Ill.

Replying to yours of the 23rd inst., will say that I am well pleased with the results obtained by planting your seed corn this year. My corn is yielding approximately seventy bushels per acre, which I consider quite good for this year, I attribute no small part of it to the fact that I planted fresh seed from Funk's. I am sure it pays to plant fresh seed every year, and I will send you an order again next year as I think Funk's seeds second to none that I can buy, especially "Gold Standard Leaming."

J. A. FRAKER, Shelbyville, Ill.

In reply to your inquiry in regard to seed corn of Leaming variety purchased of you last spring, will say it was planted and tended under most unfavorable conditions, owing to continued wet weather; yet in spite of all, the yield will be most satisfactory and we are well pleased with it.

JOHN FLORENCE, Plain City, Ohio.

Received your letter in regard to the bushel of early Leaming seed corn I purchased from you last spring. It is yielding eighty bushels per acre, and I will plant at least 150 acres of the same corn next year. I like it as well as any corn I have ever planted.

LEONIDAS H. MULL, Manilla, Ind.

I planted eighteen acres of the seed corn I received from you. It yielded ninety-five bushels strong per acre for me. It is the best yielding corn I ever raised. It weighs out ahead of other corn. Funk's Gold Standard Leaming is good enough for me.

C. M. MOFFITT, Milan, Ill.

FUNKS 90 DAY Earliest High Yielding Corn

WE have been breeding this variety since 1892 and now offer this strain from Ear No. Ph115 as the best combination of EARLY MATURITY and HIGH YIELDING quality that has thus far been propagated.

Performance Record of some of the Progeny of Ear No. Ph115		
1905	1906	1907
Ear No. Ph115 Yield 97 Bu. per Acre	Ear No. Ph268 Yield 108.5 bu.	{ Ear No. Ph314, Yield 110 bu. Ear No. Ph316, Yield 112 bu.
	Ear No. Ph272 Yield 104 bu.	{ Ear No. Ph340, Yield 102 bu. Ear No. Ph334, Yield 106 bu. Ear No. Ph304, Yield 112 bu.
	Ear No. Ph274 Yield 112.6 bu.	{ Ear No. Ph306, Yield 108 bu. Ear No. Ph330, Yield 118 bu. Ear No. Ph346, Yield 111 bu.

The average yield per acre of this variety has steadily increased until this year we have several fields which yielded over 80 bushels per acre and which were two weeks earlier in maturity than any other variety.

This variety becomes very profitable as a feeding corn for the reason that it is sufficiently mature for that purpose early in September.

In extreme northern districts, where frost may be expected about the 25th or 30th of August, this corn has no equal for silage purposes.

We have bred Funks 90 day corn not to produce large ears but rather to increase the average number of ears per stalk. In this way we have held the Early Maturity, but have also increased the yield per acre.

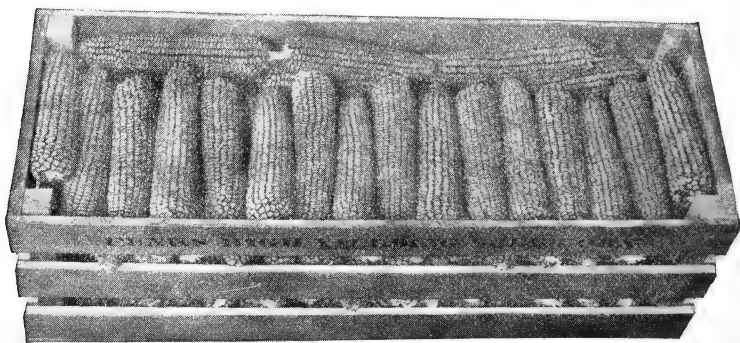
We recommend this variety for late planting in wet districts where excessive rains or floods have delayed the season. When planted the first week in June, it matures before frost and produces a heavy yield of corn and fodder.

Considering the quality of both corn and fodder produced by this variety, we do not believe there is any corn that can compare with it for the use of the man who feeds silage to dairy cows.

PRICES

On the ear in crates,	-	-	-	-	\$5.00 per bushel
Shelled and in bags,	-	-	-	-	2.50 per bushel

SEE "EASY TO ORDER" BLANK FOR QUOTATIONS ON LARGER QUANTITIES.



We are the only seed corn growers who protect their customers from the damages of early frost.

We are the only seedsmen employing a special system for drying seed corn by means of artificial heat.

Uniformity in seed corn means fewer missing hills, fewer one and two stalk hills, and increases the yield per acre 5 to 25 per cent.

I have the very best kind of luck from your seed corn. It was all cut down by hail June 9th, but it all came out all right and I don't think there are 30 hills missing in the 30 acres. It ripened up three weeks earlier than any other corn around here and will average 51 bushels per acre. My neighbors say it will make more than that. Everybody in the neighborhood has watched my yield and they think it is a good investment. Select good seed. I am very well paid for mine.

FRANK SEATON, Greenville, Ill.

I think it has paid me well to purchase seed corn of you instead of planting the old kind. My corn yield has been much better since buying seed of you.

J. A. MOORE, Granville, Ill.

In reply to your inquiry will say that the seed corn was all right. The corn is fine and solid, matured earlier than the old kind, and undoubtedly is a heavy yielder.

FRED TIEKEN, Coatsburg, Ill.

We have given your corn a good test, having planted it apart from any other corn and on a piece of ground which in this wet season was too wet for corn; yet it thrived and nearly every kernel grew. One good factor in the corn is that it is much lower eared than our old corn and is even and well filled out. We have selected enough seed this year to plant most of our crop next year. Wishing you much success, I remain,

ALBERT ZWICKER & SONS, Pre-emption, Ill.

Your inquiry at hand. We are well pleased with the seed corn. My corn received second premium at the County Fair. The late variety did not mature so good as the 90 day, but we put the most of it in silo. This has not been a very good season for corn.

PARKER JAMES & SON, Vandalia, Mich.

The five bushels of seed corn bought of you last spring was all O. K. and will get a larger yield than from my own seed, which was good.

CHARLES McCORRY, Tipton, Ind.

Yours of the 19th received and would say to return that I am well satisfied with the results I obtained from the seed corn I purchased from you. The corn grew and has matured excellently considering the unusual season. I thank you for the interest you take in your customers' success.

WALLACE STEEZER, Millbrook, Ill.

Will say my corn grown from the seed I got from you was never better than I have this year. I have bought your corn for the past seven years. My corn is yielding about 75 bushels per acre. The seed was your 90 day cattle corn, but it is very large. I measured several of the ears and they run from 9 to 11 inches long, with from 50 to 60 grains in length, and about 20 in circumference. We have not had a very favorable year here for corn, but I am very well pleased with my seed bought of you. Hoping I may be able to get seed from you for the next year, I remain,

BERT CUNNNIGHAM, Hoopeston, Ill.

My success with your seed corn was good this year. I think it pays to raise Funks pedigree seed corn as it yields good with a gain of 20% at least over old home grown corn.

CHAS. MASSION, Flanagan, Ill.

Being an unfavorable season for corn in this section, we had one of the heaviest crops from your seed. This is a good advertisement for you. I have put several on to your seed this coming season. We shall probably favor you with another order for silage in the spring.

THE R. H. NESBITT CO., Highwood, New Haven, Conn.

General Summary

SEED CORN should be tested for germination first in bulk. If the average vitality falls below 95 %, each ear should be tested individually. The strongest germination is obtained if the seed is picked before the 10th of October, or before damaged by frost. "Fire drying" holds the germination at its maximum strength until time for planting. Because of the strong and vigorous growth of fire dried seed, the yield per acre is increased from 10 to 100% over corn selected from the crib. (See Government Report on page 14.)

All butt and tip kernels should be removed before shelling.

Seed corn should be screened to produce uniformity.

All damaged, cracked, or broken kernels should be picked out by hand.

The inherent tendency and not the apparent quality should be the point most to be considered in breeding corn.

Breeding rows should be detasselled to prevent self-fertilization.

A Brief Summary of Our Methods.

1. Our first consideration in breeding is for yield per acre. **THIS MEANS AN INCREASE OF 10 TO 50% IN YOUR FIELD.**

2. We send men into the fields in September and October to select **from the stalk the most mature ears.** Only those ears which are most mature and which are growing under competitive conditions—"the survival of the fittest"—are considered as fit for seed purposes. **Prof. Williams gives this process a value of 3½ bushels per acre in yield.**

3. All of our corn is dried by means of artificial heat which insures a quick and strong germination. **Experiments by government experts prove that this drying gives an increase in the yield of 8 to 37 bushels per acre.**

4. Funk Bros. Seed corn is butted, tipped, screened, and hand picked to produce uniformity and to make the stand in the field as nearly perfect as possible.

The value of these four processes is inestimable and will make a difference of 10 to 50% in your yield.

Our old customers should renew their seed this year, buying sufficient to plant twenty to forty acres to be used as a seed plot in which to obtain their seed for their entire acreage the following year.

Our improvements are coming so thick and fast each year, that unless you renew your stock annually you will soon be losing money by not having the highest yielding corn. We estimate that this year's seed corn will produce from 5% to 25% more per acre than the seed sent out last year.

We can sell you seed corn cheaper than you can produce it yourself.

O A T S

Funks Great American

THIS is the first opportunity that our customers have had of purchasing this variety. For five consecutive years, Funks Great American has proven its high yielding quality in competition with the best known varieties on the market. The following is a table of the results for five years:

VARIETY	1903	1904	1905	1906	1907	5 Yrs. Av.
	Rank	Rank	Rank	Rank	Rank	Yield per Ac.
Funk's Great American	1	1	1	1	1	55.9
Silvermine.....	3	4	2	5	3	47.4
Big 4.....	10	3	4	2	5	46.0
Goldmine.....	15	11	3	12	6	45.8
Great Dakota.....	5	2	8	4	9	45.4
Mussellshell.....	7	5	9	6	12	44.1
American Banner.....	12	7	12	3	11	43.9
Quaker.....	2	12	13	7	4	43.2
Montana Late.....	4	9	10	9	2	41.9
Wessels Wonder.....	6	6	11	14	7	40.1
Garton's Tarter King.....	8	8	5	15	10	39.3
Red Texas Rust Proof.....	11	14	6	8	13	37.9
Wisconsin No. 4.....	9	10	14	10	8	37.1
Clydesdale.....	13	13	15	11	15	36.8
Probstier.....	14	15	7	13	14	35.2

These results show that this variety is no longer an experiment. It is a **PROVEN** yielder and we have no hesitancy in claiming that it is the highest yielding variety known that is thoroughly adapted to the Corn Belt climatic conditions. Any farmer in the Corn Belt knows that the variety of oats most successful under our peculiar conditions of soil and climate must be adaptable to many changes. Funks Great American is the only variety that has stood the test year after year with any consistency in performance record. Cold seasons, hot seasons, wet seasons, and dry seasons, and we have had them all during the past five years, have made no change in this variety's high yielding record. It stands in a class by itself.

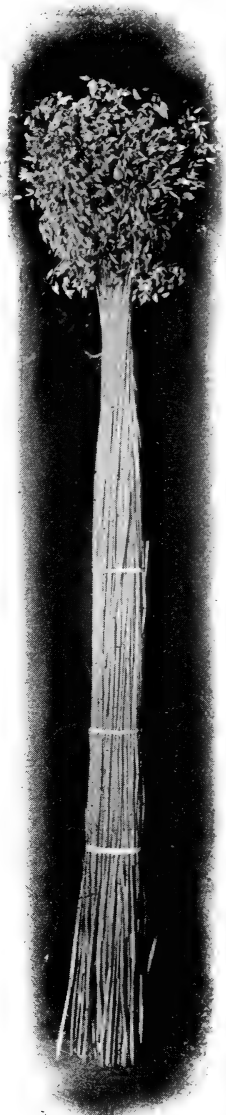
Funks Great American seed oats originated from a single head of oats which was so prominent on account of its length of straw and size of berries



that it was at once selected as being a probable winner. The seed was carefully saved each year until sufficient was had to sow a half acre test plot and it was then grown in competition with other well known varieties as shown on preceding page. From the first year's test it was easily seen that it was not a probable winner but **the winner.**

This variety is of medium early maturity, ripening about July 6th to 10th, according to the season. It produces large white grains of exceedingly heavy weight. The straw is medium heavy but the rooting system is so developed as to make this variety almost free from lodging. In other words you need have no fear of its blowing down. Considering the yield, quality of grain, and quality of straw produced by Funks Great American you can do no better than to sow them. The increased yield will more than pay you back your investment in one year. And remember this, that these oats can be bought only direct from us. No other seed house can offer them to you.

ALL OATS ARE THOROUGHLY
SCREENED AND FANNED
TO PRESERVE ONLY
THE HEAVIEST SEEDS. THE
STOCK SEED OF THIS VARIETY
WAS TREATED WITH A FORMALIN
SOLUTION WHICH MAKES
THE OATS
ABSOLUTELY FREE FROM SMUT
FOR AT LEAST TWO YEARS



Owing to the unsatisfactory season for oats growing in Illinois this year, our stock of this variety is not as bright as we would like to have it, but repeated germination tests show a growth of better than 95%. It is not brightness that makes the yield; it is the ability of the plant to grow a big, heavy head of oats. Every seed of Funks Great American produces that big, heavy head.

SEND FOR SAMPLES

PRICES

1 to 5 bushels	-	-	-	-	-	\$1.00 per bu.
5 to 16 bushels	-	-	-	-	-	.95 per bu.
16 to 50 bushels	-	-	-	-	-	.85 per bu.

Our supply is limited and will soon be exhausted. Place your order now.

NORTHERN GROWN OATS

Owing to numerous requests from our patrons for stock seed grown in Minnesota and Wisconsin, we made arrangements this year for the growing of several of our principal varieties in Northern latitudes. This proved to be a lucky deal for the reason that the bulk of the oats raised in the Corn Belt this season were very light in weight and were badly stained during the wet weather immediately following the cutting. The result is that we have an extra-select stock of the following varieties to offer our customers. The seed is extra bright, tests from 38 to 42 pounds per bushel and germinates from 95% to 98% strong. These oats are all carefully screened and fanned to remove small or light oats and all weed seeds.

Samples will be gladly sent on application.

Silvermine Oats

By reference to the table on page 25 you will see that this variety has performed very consistently throughout the five years test, making an average second only to Funks Great American in yield per acre. It is of medium early maturity, ripening in time to avoid hot winds, drought, etc., which are apt to hit the later varieties hard enough to shorten the yield. This variety produces a beautiful white berry, plump and of good length, making them extremely heavy. We can recommend the Silvermine oats to be what the name implies, A MONEY MAKER.

Big 4 Oats

The Big 4 Oat is one of the standard varieties which has been under our care for years. We have increased the yield and bettered the quality until they can hardly be recognized as the old Big 4 Oat. Referring you again to our tests it will be seen that this variety has made an average of 46 bushels per acre for the past five years in the test plots, and in the general fields has some years made much better than that. We can give this variety a strong, hearty indorsement to those who desire to stick by the old Standard.

Great Dakota Oats.

Originally brought here from North Dakota, this variety has "made good" among the best yielders. It ripens early, stands well and yields heavy. We can give you every assurance of a heavy crop from this variety.

Red Texas Oats

We have a limited amount of Red Texas Rust Proof Oats on hand for those who prefer an extra early maturity. This is one of the greatest oats to "stand up" under all conditions that we have ever raised.

PRICES FOR ANY OF THE VARIETIES

1 to 5 bushels	-	-	-	-	\$1.00 per bu.
5 to 16 bushels	-	-	-	-	.95 per bu.
16 to 50 bushels	-	-	-	-	.85 per bu.

You cannot afford to sow doubtful seed. Sow something that will show a big profit on your season's work.

Timely Suggestions in Regards to Sowing Oats

We would advise sowing oats as early as possible. By that we mean as early as possible without "mudding them in." But start the work of preparing the seed bed as soon as the frost is out of the ground and the soil is fit to work. If the field in which you intend to sow oats grew corn the year previous it is a good plan to first cut the stalks as fine as possible with a stalk cutter. We do not advise raking and burning on account of the loss of fertility which is contained in the stalks, but we do advise getting them in such shape as to not interfere with the proper working of the disk harrow.

Next, disk the field one way, and lap each cut one-half of the width of the disk. If the oats are to be sown broadcast they should be sown before the disk is run over the first time. Cross disk the field, lapping the disk the same as in the first operation. Then go over the ground with a smoothing harrow to cover any oats that may still be on top of the ground. It is not a bad plan to finish by rolling the entire field with a medium heavy roller. We have found that in some seasons this alone will make a difference in the yield of 10 to 15 bushels per acre.

If the oats are to be sown with a drill instead of broadcast, proceed as above, only sow the oats AFTER the second disking. Then finish by harrowing and rolling. We do not advise deep sowing of oats. In average seasons if the seed is covered with one inch of soil it will be found to produce the best results.

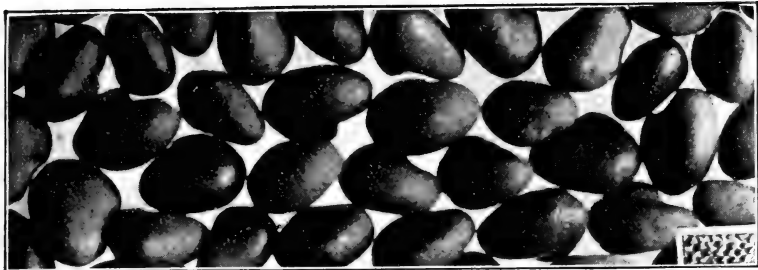
We have found a wide difference according to seasons in oats sowed broadcast and oats that have been drilled in, but one season the broadcast have yielded the most, while the next year the drilled oats have proven the better.

The greatest objection to drilling any considerable acreage is the length of time required to cover the ground with a drill as compared to an endgate seeder which will sow about thirty feet wide at a "through."

In sowing broadcast about 3 bushels per acre should be sown. With a drill 2 to 2½ bushels per acre is sufficient.

One method worthy of extensive trial that has been given is that of procuring seed from the oats country proper, that is, the latitude of Minnesota, Northern Wisconsin, and North Dakota. The basis of the theory is that in these sections, on account of the climate, oats secure their highest development, and that if oats are brought down to a less favorable climate they will retain their vitality for two or three years, of course giving an increased yield and better quality.—From "Wallace's Farmer," September 27, 1907.

Notice: From time to time we will introduce new varieties of oats which have proved their worth after years of testing. Our space is too limited to go into details of our work in oats breeding, but our patrons may rest assured that they will receive nothing from us that has not been tested thoroughly before RECEIVING OUR STAMP of approval.



RED CLOVER OF GOOD QUALITY, NATURAL SIZE AND MAGNIFIED EIGHT TIMES

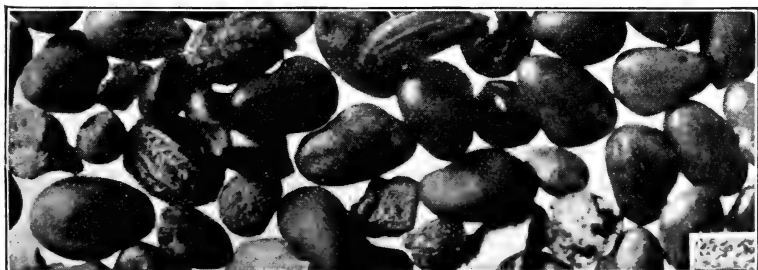
RED CLOVER

IT HAS been proven that the bloom of the clover plant commences to blossom from the bottom and gradually develops its small flowers until the process has been completed and development of the topmost flower has taken place. There is, however, a difference of about thirty days in the development of the flowers at the bottom and the flowers at the top, consequently those flowers at the bottom will have been developed a month before the flowers at the top will have been fertilized. What then is the result when these plants are cut for seed? Simply this, that either the seed at the base of the bloom will have become so mature as to have dropped off or that the seed at the top of the bloom is so immature as to be incapable of producing a healthy, vigorous plant. Did you ever stop to think that in nearly all of the clover seed you have bought in the past that about one-half of it never produced a plant? The next time you buy clover seed, germinate a sample of it and observe how many of the seeds grow to the point of producing two fully developed leaves.

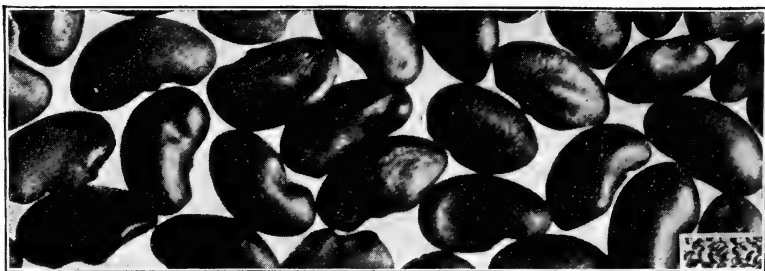
After knowing the difference can you go on sowing the old kind? Most certainly not. This does not take into consideration the danger of polluting your land with buckhorn and other noxious weed seeds. Whenever you find clover containing buckhorn seed, which is shown in the accompanying illustration, refuse it absolutely. Do not sow anything on your land that will cause you trouble, labor, and annoyance.

We can furnish choice recleaned Red Clover seed absolutely free from buckhorn and other noxious weed seeds at reasonable prices. Samples sent on request.

Our prices for Standard Recleaned seed is \$12.00 per bushel—2 or 2½ bushel cotton bags 25 cents extra. As clover is very scarce this year, we would advise making your purchase at once. Owing to the fluctuations of the clover seed market, the above price is subject to change without notice.



IMPORTED RED CLOVER OF LOW GRADE, NATURAL SIZE AND MAGNIFIED EIGHT TIMES



ALFALFA OF GOOD QUALITY, NATURAL SIZE AND MAGNIFIED EIGHT TIMES

A L F A L F A

OWING to the rapidly increasing acreage being sown to Alfalfa each year in the United States, the demand for seed has become so great that a large number of seed dealers have begun the practice of importing large quantities of low grade Alfalfa seed to supply the wants of the American farmer.

Because of the fact that all of the European countries except Spain and Turkey support seed testing stations for making complete tests of Alfalfa seed for mechanical purity and germinative strength and enforce laws to prevent the sale of the inferior grades, the United States and Canada have become the dumping ground of Europe for Alfalfa seed of low quality.

The following is a copy in part of a table of analyses of some samples of low grade imported Alfalfa seed taken from Bulletin 111, Part III, Bureau of Plant Industry, U. S. Department of Agriculture, Washington, D. C.:

No. of Sample	Alfalfa Seed	Other Seeds	Dirt and Broken Seeds	Live Alfalfa Seed	Cost per 100 lbs. of Alfalfa Seed that germinated
2941	96.18	1.28	2.54	44.24	\$18.30
2996	89.42	3.68	6.90	50.52	18.31
3002	88.06	3.24	8.70	46.23	20.33
3003	87.8	3.54	8.66	39.50	25.06
3047	90.46	3.97	5.57	52.47	19.53
3158	90.80	4.68	4.52	8.17	22.22
3751	87.40	2.10	10.50	6.99	37.55

We are well aware that our customers are too progressive to be caught with any of this low grade imported seed. But we simply want to warn you and to **CALL** your attention to the difference between two grades of seed. One grade is represented by our standard which calls for non-irrigated, home-grown seed, free from dirt and weed seeds, and of high germination. The other grade is represented by the standards of some of the other seedmen who were published last season for selling adulterated seeds of both Alfalfa and Red Clover. Compare the value when sown. Ours at \$17.50 per cwt. (\$10.50 per bu.) and the other fellows at anywhere from \$25.00 to \$50.00 per cwt. (The prices in the above table are importer's prices, to which would be added from \$2.00 to \$5.00 before it reached the consumer and which would multiply the germinative value from 2 to 16 times.)

Don't be misled by the cheapness of any seed. If the price is low, the quality is also low at a ratio of 2 to 1.

Alfalfa seed is sold on a fluctuating market, so we make the above prices subject to change without notice.

Send for Samples

TIMOTHY

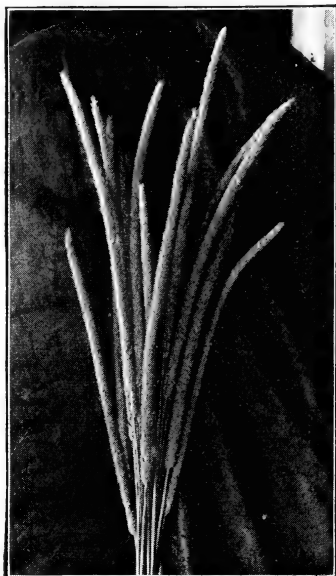
TIMOTHY is the old "stand by" for permanent and temporary meadows. For hay nothing has yet been introduced into the Corn Belt to equal it. **THERE HAS BEEN MORE MONEY LOST IN TIMOTHY SEED THAN ANY OTHER SEED THAT HAS EVER BEEN SOWN.** The chief reason for this is lack of germinative vigor. Too often when timothy seed is first thrashed, it is run into a bin and allowed to heat from being confined in too large bulk. This naturally destroys the vitality, the result is that when the seed is sown it often results in a failure to get a stand.

Our timothy seed is home grown, pure, and free from weed seeds. The germination is the highest. We have guarded against the evil of heating by storing the seed in bags, not in bins.

Samples Sent on Application.

Prices subject to market fluctuation.

Per bushel, - - - \$2.50
Two bushel bags (cotton) 25c extra



The National Corn Exposition

WILL BE HELD UNDER THE AUSPICES OF

The National Corn
Association

During the Fall of 1908

AT OMAHA, NEBRASKA

If you are interested write us for a list of **SPECIAL PREMIUMS** which we will offer at this show for samples of corn grown from seed purchased from us this year



Live Stock Department

THE LIVE STOCK DEPARTMENT OF FUNK BROS. SEED COMPANY is one of the main spokes in the wheel that is necessary to the success of a constantly increasing business. "Always to the front with market toppers and premium winners." We make that assertion and are able to prove our ability as breeders and feeders by our accomplishments.

ACTIONS SPEAK LOUDER THAN WORDS. At the 1907 International at Chicago, with five car loads of cattle, one car load of Shropshire sheep and one car load of pure bred Chester White hogs, we have to our credit, one GRAND CHAMPION, one Champion, eight first, five second, one third, and one fourth, a total of 15 premiums.

Shropshire Sheep. The following is a copy of a letter written to our commission firm who handled our car load of first premium Native Yearling Wethers:

Shinn Fry & Co.,

Union Stock Yards, Chicago, Ill.

Chicago, Ill., Dec. 13, '07.

"The killing quality of the prize load of sheep that you sold for Funk Bros., will say that they were the best and most uniform lot of good sheep for the number I have ever seen, besides making an unusual good yield, as they were full when weighed and after carrying them for five days they made 54% net after allowing 3% shrinkage for warm weight.

This load of sheep certainly shows great credit for the man who fed them."

JESSE DAVIS, Head buyer for Armour & Co.

We breed Shropshire Sheep because we have found them to be popular and the best all around mutton and wool producers for the farmer to handle. Our flock consists of imported rams and ewes of our own importation and foundation stock from the leading breeders of England, Canada, and the United States—Mansell, Minton, Nocks, Gwynne, Cartwright, Gibson, Davison, and other flocks represented. Ewes, ewe lambs, rams, and ram lambs for sale, both registered and unregistered stock.

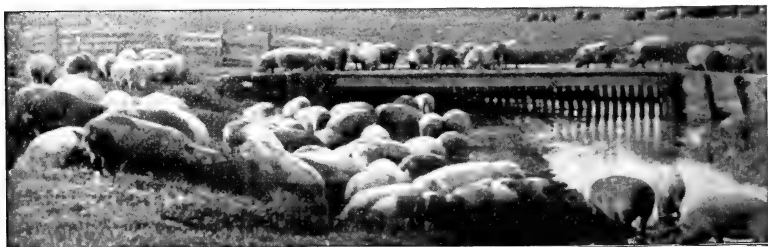
Chester White Hogs. From our prize winning car load of pure bred Chester White Hogs at the 1907 International, five barrows were selected and shown in the pure bred division by Mr. F. E. Bone. After winning in this class on foot, three of these were entered in the slaughter contest competing with all other breeds, winning first and third in carcass over 300 pounds and first under 300 pounds with GRAND CHAMPION over all breed and weights. This makes the second time our strain of Chester White Hogs have won the GRAND CHAMPION prize on carcass over all breeds at Chicago.

"THE PROOF OF THE PUDDING IS IN THE EATING." Our herd consists of over 300 head—many of our sows are sired by and bred to State and World's Fair premium winners. The Chester White is prolific, strong bone, good broad back, excellent mothers and produce the choicest meat. When crossed with other breeds, they always mark their offspring white and make market toppers. Bred sows, gilts, and male hogs old enough for service for sale.

Space does not permit, in a seed catalogue, to go into details of our work in live stock breeding. Those interested should visit our farms and personally inspect the stock we have to offer and we shall be pleased to afford every facility for such examination. We invite correspondence from those unable to visit us. Kindly state your wants plainly to avoid extra correspondence and delay.

Our Motto: "IT PAYS TO BREED THE BEST"

Live Stock Dept. FUNK BROS. SEED CO., Bloomington, Illinois



VERY IMPORTANT.—Write your name very plainly and give your Postoffice, County and State in full every time. No goods sent C. O. D. Loose money is not safe.

[illegible]

We Will Consider it a Special Favor if You Write Below the Names of Some of Your Friends Who Are Likely to Use Seed

Lbs.	$\frac{1}{4}$ bu.	$\frac{1}{2}$ bu.	Bush.
NAMES OF ARTICLES WANTED			
State if Wanted in the Bar or Shelled			
Dols.	Cts.	Dols.	Cts.
Price			
Dols.	Cts.	Amount	

Genuine Dwarf Essex Rape

DWARF ESSEX RAPE is more widely grown and has attained greater popularity as a forage crop than any other crop common on the American farms. When not used as a forage crop it is sometimes grown for the purpose of plowing under in the fall, making as it does an excellent green manure, productive of humus.

Sown with oats in the spring, it affords after harvest, the best and most nutritive pasture for both hogs and sheep. When sown with a nurse crop 2 to 3 pounds per acre are sufficient for a heavy stand.

It may be sown broadcast or drilled without a nurse crop, on prepared ground, during any month from March to August, and even later in the southern states, with the certainty of its making a crop in from six to eight weeks that will support several head of sheep or hogs per acre for six weeks or two months.

When sown broadcast or drilled without a nurse crop, from 4 to 6 pounds per acre should be used.

Twenty-five to thirty cents per acre to produce eight to ten tons of green fodder looks like a good investment, doesn't it?

Our supply of Genuine Dwarf Essex Rape is our own importation.

By importing direct, we are able to assure our customers of getting the genuine article free from bird rape, mustard or foreign weed seeds.

This alone is worth a great deal, inasmuch as you take no chances of befouling your land with noxious weeds.

Prices on application

Tennessee Ground Rock Phosphate

Phosphorous is the one element of fertility above all others which has a high, absolute and permanent value to the Corn Belt farmers.

Are you a "soil robber" or have you come to the point where you have decided to become one of those advancing farmers who actually manufacture corn by supplying the growing crop with plant food at less cost than the finished product. There is the point where the fine line is drawn between the man who farms and the man who farms intelligently. Don't be a "soil robber." Put back what you take out, only do it at a less cost.

Study This Table of Facts

NAME OF MATERIAL	VALUE PER TON				
	Nitrogen	Phosphorus	Potassium	Total Value	Cost
Fresh Farm Manure	1.50	.24	.60	2.34	1.75
Clover Hay	6.00	.60	1.80	8.40	9.00
Cow-Pod Hay	6.45	.60	1.98	9.03	8.00
Steamed Bone Meal	3.00	30.00		33.00	28.00
GROUND ROCK PHOSPHATE		30.00		30.00	15.00

Which shows the greatest net profit per ton on the ground?

We have a limited amount of Tennessee Ground Rock Phosphate on hand at our warehouse at Funks Grove, Illinois, which we quote at \$12.00 per ton. F. O. B. cars, bags returnable when in good condition at 10 cents each (making a rebate of \$2.00 per ton.)

Ground rock phosphate should be applied at the rate of 1000 pounds per acre and can be sown broadcast with an endgate seeder.

We want YOU
to TEST OUR
SEED CORN
for GERMINATION
BEFORE BUYING

SEND US *the* EN
CLOSED POST
CARD *and* LET
US MAIL YOU
A SAMPLE

ALL GOODS *are*
GUARANTEED
UP TO SAMPLE
OR MONEY *will*
be REFUNDED

*Read the General Announcement
on page one--Important*